



Ergo Plus

Performance Accelerator



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Warning

Overexertion can cause serious injury, including heart attacks. Some individuals cannot safely elevate their heart rate to the levels of typically used heart rate training zones. No one should begin an exercise program without first obtaining medical clearance, especially if there is a personal or family history of heart disease, high blood pressure, or if you are over age 40, have diabetes, high cholesterol, smoke cigarettes, are overweight or are taking certain medications. Stop exercising and seek medical attention if you notice signs of overexertion or heart problems, such as pain or pressure in the left or mid-chest area or left neck area, shoulder or arm, light-headedness, cold sweat, unusual paleness or fainting. Also note that the signals used by this monitor may interfere with a pacemaker or other implanted devices, consult the manufacturer of the implant device and/or your physician prior to using this monitor.

CONGRATULATIONS!

Welcome to the future of wireless heart rate technology! Your purchase shows that you are serious about your exercise and are committed to achieving your best. Today, getting the most from your exercise doesn't necessarily mean you have to spend longer periods of time to achieve your goals. With Target Heart Rate Training, you will increase the effectiveness of your workout by monitoring and quantifying your results every step of the way. For most individuals as little as 20 minutes in your target heart rate zone each session is enough to achieve substantial health improvements. The Acumen ERGO Plus will act as your personal coach and guide you to your fitness goals more effectively.

MISSION STATEMENT

At Acumen we have listened to what people such as yourself have been asking for in a heart rate monitor and are committed to your satisfaction. We know you will enjoy all of the added features, along with those never found before in other heart rate monitors, and the ease of use incorporated into our products. If you ever have any questions, comments or suggestions, please write or call our staff. We greatly value your feedback and look forward to continuing to provide you with products and support that's second to none. Thank you for your purchase and anticipated support.

Product Development Team

ERGO Plus Features

- Conductive Fabric Heart Rate Strap
- Backlight with SmartLite
- Shock Resistant Design
- Water Resistant up to 30 Meters
- ECG Accurate Heart Rate
- EZ-Set Target Zone Pat. NO.US6345197B1 Automatic Programming with Audible and Visual Alarm Indicators
- Time In/Above/Below Heart Rate Target Zone
- 12/24 hr. Time/Date Display with Daily Alarm
- Stopwatch with 1 Button Quick Start
- Calorie Counter
- Fitness Index

WHAT'S IN YOUR PACKAGE

Your ERGO Plus package includes:

- A** Ergo Plus
 - Sleek, sporty styling with an easy to read display and comfortable button locations.
- B** Conductive Fabric Heart Rate Strap
- C** Instruction Manual

A



B

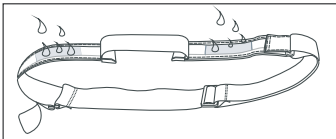


OPERATING YOUR ERGO PLUS

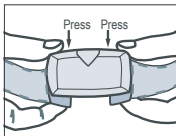
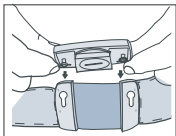
I. Attaching Your Heart Rate Monitor

1.) Attach the transmitter belt to your chest

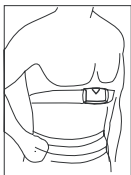
Step 1: Moisten each of the two conductive fabrics of the Chest Belt.



Step 2: Insert the two Pins at the back of the transmitter into the two mounting holes on the Conductive Fabric Chest Belt. Push the transmitter downwards and lock the transmitter in place.



Step 3: Adjust the tension of the Elastic Strap and check that the conductive fabrics are firmly against your skin.



2.) Attach your wrist monitor. The watch does not have to be attached to your wrist to register your heart rate, but it should be within 3 feet of your chest.

3.) Press **MODE/SET** button to start your heart rate reading.

Buttons and Functions



● **MODE/SET** Button

- Press momentarily to change modes; to proceed to the next item in the setting mode.
- Press and hold to enter or exit the setting mode.

● *** / (•••)** Button

- Press momentarily to activate the night light for 3 seconds; to decrease the digits in the setting mode (press and hold to change it fast).
- Press and hold to switch alarm sound ON/OFF in Time/Date or Heart Rate/Stopwatch Mode (indicated by ••• icon displaying on the screen).

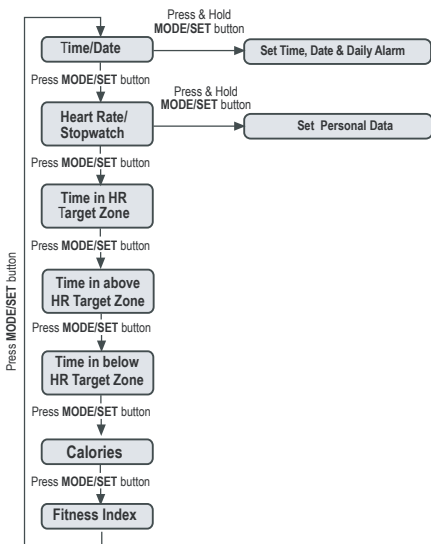
● **STR/STP/RESET** Button

- Press momentarily to start or stop the stopwatch; to increase the digits in the setting mode (press and hold to change it fast).
- Press and hold to clear the data of the stopwatch in Heart Rate/Stopwatch Mode when the stopwatch is stopped. If not clear, it will add up when the stopwatch restarts (But the data of stopwatch and other records, such as time in/below/above heart rate target zone, calories and fitness index will saved until they are replaced with new data by starting a new workout.).

Note: All buttons produce one short beep when pressed. Press and hold operation also produces another beep. When the daily alarm is beeping, it can be silenced by pressing any button.

Modes of Operation

To toggle through different modes, press **MODE /SET** button.



Note: If no button is pressed for 60 seconds, the watch will automatically exit the setting mode.

Time/Date Mode

The watch firstly enter Time/Date Mode when turned on.

Setting the time

1. From Time/Date Mode, press and hold **MODE /SET** button to enter the setting mode.



2. Hour (blinking)

- Press ***/>** button or **STR/STOP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



3. **Minutes** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



4. **12/24 Hr. Time** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to select 12 or 24 hour time.
- Press **MODE/SET** button to proceed to the next item.



5. **Year** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



6. **Month** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



7. **Day** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



Note: The weekday is automatically set according to the year, month and date entered.

8. **Daily Alarm** (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to set the alarm ON or OFF.
- Press **MODE/SET** button to proceed to the next item.



9. Alarm Hour (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



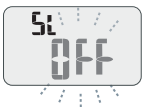
10. Alarm Minute (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



11. Smart Lite (blinking)

- Press ***/⏸** button or **STR/STP/RESET** button to set the Smart Lite to ON or OFF.
- Press **MODE/SET** button to exit the setting mode.



Note: Smart Lite is set to "ON", press any button will activate the night light for 3 seconds between 6 p.m. and 6 a.m.

Heart Rate/Stopwatch Mode

From Time/Date Mode, press **MODE/SET** button once to go to Heart Rate/Stopwatch Mode and begin your exercise.

Heart Rate -The "♥" icon indicates the heart rate circuit is on. If your transmitter is correctly attached, the clock icon should begin to blink and your current heart rate in beats per minute will come up on the display. If no heart rate or no key action for 15 seconds and for 5 minutes between two heart rates, the heart rate circuit will switch itself off. To restart it by pressing **MODE/SET** button.

Target Zone Alarm - Your Target Zone autosets based on age setting, modifying it is optional. Your watch will provide both a visual indicator (by flashing the heart rate digits) and an audible alarm (by beeping with the rhythmic beating of your current heart rate) if your heart rate is above or below your target zone. The "▲TZ" "TZ" or "TZ▼" icons will indicate that your heart rate is above, within or below the target zone respectively.

The Stopwatch - From any Mode, press **STR/STP/RESET** button to activate the stopwatch. You can pause and restart by pressing this button. You can also press **MODE/SET** button to view other modes without interrupting the stopwatch. To reset the stopwatch, just press and hold **STR/STP/RESET** button for 3 seconds in Heart Rate/Stopwatch Mode while the stopwatch is stopped.

Setting Your Personal Data

1. From HeartRate/Stop watch Mode, press and hold **MODE/SET** button to enter the setting mode.



2. **Age** (blinking)

- Press ***/•••** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item (If you want to use the built-in EZ setting of 65-85% of you max., set only your age and skip steps 4& 5.).



3. **Target Zone Alarm**(blinking)

- Press ***/•••** button or **STR/STP/RESET** button to set the Target Zone Alarm to ON or OFF.
- Press **MODE/SET** button to proceed to the next item.



4. **Upper Target Zone Limit** (blinking)

- Press ***/•••** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



5. **Lower Target Zone Limit** (blinking)

- Press ***/•••** button or **STR/STP/RESET** button to adjust the value.
- Press **MODE/SET** button to proceed to the next item.



6. Exercise Factor (blinking)

- Press ***/>** button or **STR/STP/ RESET** button to adjust the value.
- Press **MODE/SET** button to exit the setting mode.



Time in HR Target Zone Mode

From Time/Date Mode, press **MODE/SET** button twice to enter Time in HR Target Zone Mode. The watch auto-matically records the time when your heart rate is within the target zone.

By working within the correct target zone, you will achieve your fitness goals and strengthen your cardiovascular system in less time. Effective conditioning requires that you maintain your heart rate at the proper level for at least 20 minutes per workout (or per day).



Time above HR Target Zone Mode

From Time/Date Mode, press **MODE/SET** button 3 times to enter Time in above HR Target Zone Mode. The watch automatically records the time when your heart rate is above the target zone.



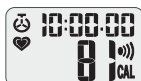
Time below HR Target Zone Mode

From Time/Date Mode, press **MODE/SET** button 4 times to enter Time in below HR Target Zone Mode. The watch automatically records the time when your heart rate is below the target zone.



Calorie Mode

From Time/Date Mode, press **MODE/SET** button 5 times to enter Calorie Mode. The calorie counter automatically (and only) activates when the watch is receiving the heart rate signals.



Note: The rate of calorie consumption can vary drastically from one individual to another. The calorie counter on this watch is designed to provide you with only an estimate based on standard average rates of consumption. In most cases, it's best to underestimate your calories consumed by setting the Exercise Factor lower.

Fitness Index Mode

From Time/Date Mode, press **MODE/SET** button 6 times to enter Fitness Index Mode. This feature



is used to measure your fitness level by monitoring how quickly your heart rate starts to come

back down after your workout. As your cardiovascular system improves, it will take less time for your heart rate to come back down to a resting level after your workouts. To activate it, just stop the stopwatch when you finish exercising. The watch will automatically switch to the Fitness Index Mode and begin a 60-second-countdown timer. During this countdown, you should be concentrating on bringing your body down to a comfortable rest, by taking deep slow breathes and relaxing your muscles. When the countdown timer reaches zero, the watch will beep twice and display a number between 0 - 99. The higher this number, the better your recovery rate.

Note: The chest transmitter needs to remain attached to your chest for this feature to work.

Fitness Index Level	Grade
0~20	Poor
21~40	Fair
41~60	OK
61~80	Good
81~100	Excellent

DETERMINING YOUR EXERCISE FACTOR

The Exercise Factor is one of the variables used by the watch in estimating the amount of calories burned during your workout. The most common forms of exercise are listed in the table below. Select a number from the table below based on how hard you plan to exercise for a given activity and set your watch accordingly (see Setting Instructions on page 11). If you do not find the particular activity you are looking for, refer to one that is similar.

Table of Exercise Factor Settings

Exercise	Intensity Level		
	Light	Medium	High
Aerobics	6	7,8	9
Basketball	7	8,9	10-12
Bowling	2	3	4
Cycling	3-5	6-8	9,10
Dancing	3	4-6	7,8
Football	6-7	8	9,10
Golf	4-5	6	7
Hiking	3-5	5-8	9-11
Jumping Rope	8	9,10	11,12
Running	8-10	11-15	16,17
Skating (Ice/Inline)	5	6,7	8,9
Skiing (Cross-Country)	6-7	8-10	11,12
Skiing (Downhill/Water)	5	6,7	8
Swimming	4	5-7	8-10
Stair Climbing	4	5,6	7,8
Tennis	4-5	6-7	8,9
Volleyball	3	4,5	6
Walking	3	4-6	7
Weight Training	3-4	5-8	9,10

BATTERY REPLACEMENT

The Watch Battery Replacement

We recommend that you should take it to a local jewelry store or an authorized Acumen service center in order to guarantee that it will maintain its water resistance. Improper battery replacement or service will void the warranty. If you feel comfortable replacing your own batteries, be careful to notice how the old battery comes out and the proper positioning of the hold-down contacts before removing it. Also, be careful to line up the o-ring gasket properly before replacing the battery door cover. To insure battery water resistance, it's a good idea to smear a small drop of silicone lubricant spray on the rubber o-ring.

Note: The watch will enter the shelf mode (i.e. blank screen) after changing battery. Press any button to return to normal mode.

Chest Transmitter Battery Replacement

Step 1: Remove the transmitter from the belt.(Fig.1)

Step 2: Use a coin to unlock the battery door, and then replace the old battery inside with a new one. (Fig.2)

Step 3: Lock the battery door firmly into place making sure the O-ring seal does not get pinched or distorted.

Caution: to avoid damage to the battery door, do not over tighten.

Fig.1

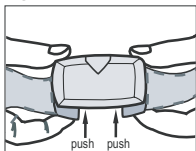
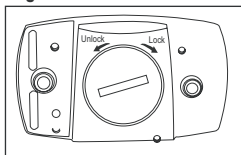


Fig.2



GENERAL PRECAUTIONS

Do not operate buttons under water. Although your watch is water resistant, be sure that you do not operate its buttons under water as pressure can cause them to leak.

Dry off transmitter after use. The transmitter will automatically shut itself off once you have disconnected it from your chest. However, it is important to thoroughly dry it off after every use, since moisture in the electrodes can cause it to remain on longer.

Electrode precautions. Be sure not to excessively twist or bend the electrode portions of the chest transmitter (never bend backwards), especially when storing it. This can permanently damage their conductivity and cause mechanical damage to the internal circuit.

Global Reset. If your watch should ever get stuck or act erratically due to dropping it, static shock or some other unforeseen reasons, this feature will allow you to reset the watch and return all settings back to their internal defaults. To perform this function, press and hold all buttons together for 3 seconds under any mode. The watch will enter the shelf mode, which is of the blank screen. Press any button to restart it.

Caution: Global Reset will CLEAR UP EVERYTHING that include your Personal Settings.

TECHNICAL SPECIFICATIONS

Shock Resistance

Shock resistant design

Water Resistance

98 feet (or 30 meters)

Not intended for diving

Operating Temperature

32°F to 122°F (0°C to 50°C)

Battery Type

Heart Rate transmitter:

Lithium CR2032

Watch:

Lithium CR2032

Battery Life

Heart Rate transmitter:

Approx. 2.5 years, average use of 1 hr./day, 7 days/week.

Watch:

Approx. 1.5 years, average use of 1 hr./day, 7 days/week.

Memory Recall Items

Total elapsed time, time in/ below/above TZ, calories and fitness index.

Time Default Mode

The watch will automatically return to Time Mode if no heart rate or no key action for 5 minutes.

Global Reset

This feature will clear all memory data and user settings and return all settings to the default values listed. Press and hold all 3 buttons for 3 seconds, the watch will enter the shelf mode (also happens at battery replacement), which is of the blank screen. Press any button to restart it.

TECHNICAL DISPLAY GUIDE

Display Items	Default Setting	Range
Time	8 AM/12 Hr. *AM & PM indicators shown only in the Setting Mode.	12/24 hr. clock
Alarm Time	8 AM/ OFF	ON/OFF
Date	01/01/2001	To 12/31/2099
Age	30	7 - 99
Heart RateDisplay		20 - 250 bpm
TZ Alarm	OFF	ON/OFF
Upper Target Zone Limit	162 beats per minute	OFF, 20 - 250
Lower Target Zone Limit	124 beats per minute	OFF, 20 - 250
Note: Upper TZ Limit cannot be set less than Lower TZ Limit and Lower TZ Limit cannot be set more than Upper TZ Limit. However, they can be set within 1 beat of each other, or either one can be set to OFF.		
Exercise Factor	5	0 - 20
Stopwatch Capacity	00:00:00	To 23:59:59 (rolls over at 24 hours)
Time in TZ	0	0 - 24:00
Time in above TZ	0	0 - 24:00
Time in below TZ	0	0 - 24:00
Calorie Display	0	0 - 9999 Kcal. (rolls over at 10000)
Fitness Index	0	0 - 99

Warranty

This product is warranted by **Acumen Inc.** for one year from the date of purchase (with the exception of batteries and elastic chest strap) against defects in workmanship and material. During this one-year period, these defects will be repaired or the product will be replaced by **Acumen Inc.** at its sole discretion without charge. This warranty covers normal consumer usage and does not cover damage which occurs in shipment or failure which results from accident, misuse, abuse, tampering, alteration or disassembling of the product or improper maintenance. This warranty is effective only if the product is purchased and operated in the USA and does not extend to any units which have been used in violation of written instructions furnished by **Acumen Inc.** or to units which have been altered or modified without authorization of **Acumen Inc.**, or to damage to products or parts thereof which have had the serial number removed, altered, defected or rendered illegible. The product must be returned to an authorized dealer for service if purchased outside of the USA.

Note: Please return the product to local authorized dealer for service if purchased outside of the USA.

SERVICE & REPAIR

Do not attempt to repair your product. Should the product malfunction, please visit our website at

www.acumeninc.com for Consumer Customer Service. If the problem cannot be resolved, return the product to the factory for repair. Under no circumstances should you attempt to open the housing and repair the product. Should you do this, your warranty will be voided.

In USA, securely package and return the product pre-paid to:

**Acumen Inc.,
101A Executive Dr., Suite 100,
Sterling, VA 20166 USA.**

To Return for Service

- a. First visit our website at **www.acumeninc.com/returnauthorization.asp** to obtain a Return Authorization Number.
- b. Enclose your name, address and phone number.
- c. Enclose the date of purchase (or receipt as a gift).
- d. An explanation of the malfunction or reason for return.
- e. Seven dollars and fifty cents (\$7.50) Check or Money Order payable to Acumen Inc. for return postage and handling.
- f. To ensure prompt "In warranty" service, be sure to include proof of the date of purchase.

We recommend you take the necessary precaution of insuring the parcel.

Outside USA, you should contact the local dealer or Acumen distributor in your country for customer service.

Acumen Europe BV

E-Mail: acumen@Acumeninc.com

Website: www.acumeninc.com